

# Competition Control for Pine Planting on Fields

Tennessee Department of Agriculture, Division of Forestry

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Growing pine is like growing a garden or row crop. More crop is produced if weeds are controlled.

Several herbicides control weeds and grasses without damaging pine seedlings. Mixtures can be varied depending on the vegetation to be controlled. These herbicides are sprayed over the tops of newly planted pine seedlings. For maximum effectiveness apply them early in the spring (late March to early April) when the weeds start active growth. Spraying can be done in May or June but much of the effectiveness is lost. A range of concentrations can be used. Higher rates provide longer lasting control at a higher cost.

## Herbicide mixes (per acre rates)

- 4 ounces of Arsenal with 2 ounces of Oust. Common mix, provides broad-spectrum control. Cost is about \$37 per acre.
- 1 ounce Escort with 2 ounces Oust. Good control of sericea lespedeza. Cost is about \$39 per acre.
- 4 ounces Arsenal, 1 ounce Escort, 1 ounce Oust. Controls a wide variety of species including sericea, blackberry and honeysuckle. Cost: \$44 per acre.
- 1 quart Velpar, 2 ounces Oust. Controls sericea. Can be sprayed in late February. \$33 per acre.

Sericea lespedeza can also be controlled in the fall before planting, allowing use of a wider variety of herbicides (such as Accord, which is Roundup labeled for forestry). However seed will sprout and may require additional spraying.

Spraying can be done over the entire area, in strips, or in spots around each seedling. The strip or spot methods are less expensive. To compare costs among vendors, ask about the rate of chemical applied plus the width of the strip. Strips or spots must be sprayed early. Weeds quickly cover newly planted pine seedlings and grasses and the rows are not easily located. If the rows can't be located, the entire area must be sprayed. Wider strips keep the competition away longer. Sericea reinvades the strips quickly and therefore spraying in strips is risky for control of sericea. Herbicides may be applied by tractor, ATV, helicopter or by hand with a backpack sprayer.

Prior to planting, the area should be bushhogged and burned. This results in a better planting job because the planters can keep up with their rows easier. It also controls weeds better because the herbicide contacts more new vegetation rather than dead vegetation from the previous growing season. If fire is used, some seed is destroyed. (See "Prescribed Fire").

Volunteer hardwoods are present on many old fields. If these are of low value species such as sweetgum or red maple and are numerous, they should be controlled. Hardwoods are best controlled using Arsenal late in the summer or early fall before the leaves turn color. Arsenal does not control legumes or elms well, so a different herbicide should be used if many legumes (locust, redbud) are present. Spray Arsenal directly on the foliage of the hardwoods.

Spraying Arsenal in the spring for weed control will knock back the hardwoods but will not completely control them. Spraying Arsenal in the summer or early fall to control hardwoods also controls weeds, but the weeds are not competing with the seedlings at that time, and the weeds will grow back in the spring. So if both hardwoods and weeds are a problem, two sprays may be needed for best results. But for economy spraying should be targeted to the biggest problem, either weeds or hardwoods.

As with all pesticides, read the label carefully and apply the herbicide as per label recommendations. All necessary precautions should be taken to avoid environmental contamination. Use care near desirable vegetation.

It is recommended that a qualified vendor be hired that can provide the herbicide, labor and expertise to apply it. A list of vendors and/or herbicide suppliers is available from the Division of Forestry.

It is also advisable to subsoil old fields and pastures to allow good root penetration, and to machine plant to make straighter rows. Straight rows are easier to see when applying herbicide.

Pesticides recommended in this publication were registered for the prescribed uses when printed. Should a registration be cancelled, the Division of Forestry would no longer recommend it. Use of trade or brand names in this publication is for clarity and information: it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. Landowners are encouraged to contact district representatives of the companies that sell herbicides in their area.
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